DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: ROCKY POND 4.25 Lake Area (ha): Maximum depth (m): Town: 1.2 STARK County: Coos 0.4 Mean depth (m): River Basin: Connecticut 17000 Volume (m³): Relative depth: Latitude: 44°35'25" N Longitude: 71°20'40" W 0.5 Shore configuration: 2.19 Elevation (ft): 1110 Shore length (m): 1600 Watershed area (ha): 1621.2 Areal water load (m/yr): 242.0 Flushing rate (yr⁻¹): 605.0 P retention coeff: 0.06 Lake type: natural % watershed ponded: 4.5

BIOLOGICAL:		8 March 1994	11 August 1993
DOM. PHYTOPLANKTON (% TOTAL)	#1	NO WINTER PLANKTON	MOUGEOTIA 20%
	#2	SAMPLES COLLECTED	XANTHIDIUM 15%
	#3	(TOO SHALLOW)	
PHYTOPLANKTON ABUNDANCE (cells/m	nL)		80
CHLOROPHYLL-A (µg/L)			1.42
DOM. ZOOPLANKTON (% TOTAL)	#1		NO ZOOPLANKTON
	#2		OBSERVED
	#3		
ROTIFERS/LITER			<1
MICROCRUSTACEA/LITER			<1
ZOOPLANKTON ABUNDANCE (#/L)			<1
VASCULAR PLANT ABUNDANCE			Very abundant
SECCHI DISK TRANSPARENCY (m)			1.3 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		12.5	9.0
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m³): None Anoxic volume (m³): None

CHEMICAL:	Lake: ROCKY POND Town: STARK				
	8 March 1994		11 August 1993		
DEPTH (m)	0.5		1.0		
pH (units)	6.4		6.8		
A.N.C. (Alkalinity)	4.6		3.9		
NITRATE NITROGEN	0.20		< 0.02		
TOTAL KJELDAHL NITROGEN	< 0.10		0.21		
TOTAL PHOSPHORUS	<0.001		0.014		
CONDUCTIVITY (µmhos/cm)	32.5		27.5		
APPARENT COLOR (cpu)	12		14		
MAGNESIUM			0.43		
CALCIUM			2.7		
SODIUM			1.4		
POTASSIUM			< 0.40		
CHLORIDE	< 2		.< 3		
SULFATE	6		5		
TN : TP			15		
CALCITE SATURATION INDEX			3.5		

All results in mg/L unless indicated otherwise

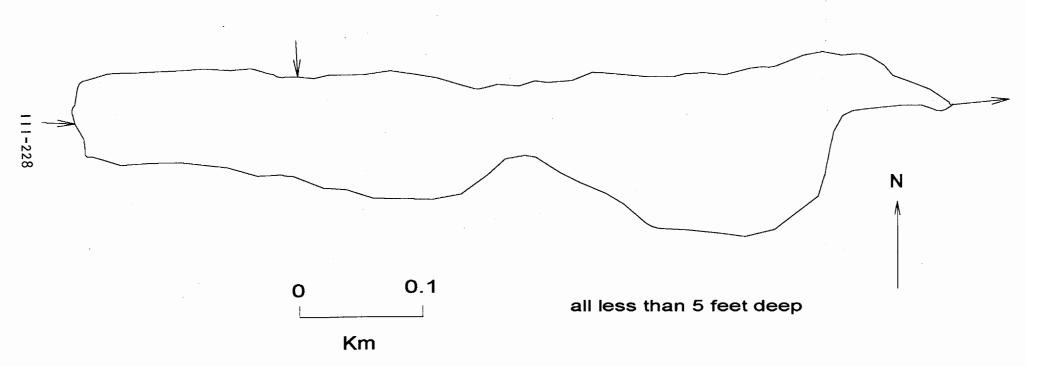
TROPHIC CLASSIFICATION: 1993

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS	
**	2	6	0	. 8	Meso.	

COMMENTS:

- 1. This is a shallow weedy pond located within the White Mountain National Forest. It is accessible by unimproved road, but the road is gated and locked by WMNF.
- 2. This pond is classified as a wetland for the purposes of the federal Clean Lakes program. It was not listed in the 1964 Water Bodies report.
- 3. The pond was too shallow and weedy to collect a winter sample. The winter water quality sample was collected near the inlet with running water. No winter plankton samples were collected.
- 4. The summer net plankton sample was a horizontal tow through the weeds. The phytoplankton observed were sparse and not typical of open-water ponds: they were primarily desmids and filamentous green algae.
- 5. The wholewater phytoplankton were also sparse; <u>Scenedesmus</u> (15%) and <u>Synedra</u> (15%) were the dominant genera.





FIELD DATA SHEET

LAKE: ROCKY POND

DATE: 08/11/93

TOWN: STARK

WEATHER: SUNNY, WARM & BREEZY

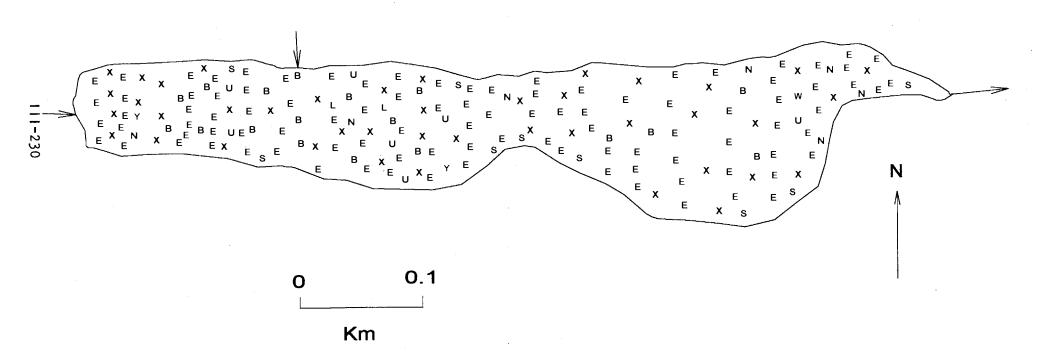
DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.5	24.0	9.0	107 %
,			

SECCHI DISK (m): 1.3 VOB COMMENTS: BOTTOM DEPTH (m): 1.3

TIME: 1625

*Dissolved oxygen values are in mg/L

Rocky Pond Stark



AQUATIC PLANT SURVEY

LAK	E: ROCKY POND	TOWN: STARK	DATE: 08/11/9	
Кеу	PLAN	ABIINDANCE		
	GENERIC	COMMON	ABUNDANCE	
E	Eriocaulon septangulare	Pipewort	Very abundar	
Y	Nuphar	Yellow water lily	Sparse	
N .	Nymphaea	White water lily	Scattered	
Х		Sterile thread-like leaf	Abundant	
В	Brasenia schreberi	Water shield	Common	
U	Utricularia	Bladderwort	Scattered	
S	Sparganium	Bur reed	Scattered	
L	Lobelia dortmanna	Water lobelia	Sparse	
W	Potamogeton	Pondweed	Sparse	
G	Gramineae	Grass family	Sparse	

GENERAL OBSERVATIONS:

1. The entire surface of the pond was covered by aquatic plants -- there was no open water. However, the pond was navigable by canoe.

OVERALL ABUNDANCE: Very abundant